1. Call to Order

2. Approval of Minutes
   9:30 am – 9:35 am
   a. pp. 3-4 Minutes of special meeting held August 5, 2020 [ACTION]

3. Actuarial Status Update
   9:35 am – 11:00 am
   a. pp. 5-14 Preliminary estimate of FY 2020 valuation results [DISCUSSION]
   b. pp. 15-26 Population projection [DISCUSSION]
   Presenters: Patrice Beckham, Brent Banister, Ben Mobley - Cavanaugh Macdonald

   Break: 11:00 am – 11:15 am

4. SBI Update
   11:15 am – 11:45 pm
   Mansco Perry III, SBI Executive Director [DISCUSSION]

5. TRA Trends and Comparisons
   11:45 am – 12:45 pm
   a. pp. 27-50 TRA trends and comparisons [DISCUSSION]
   Presenters: Julie Larson, Jay Stoffel, John Wicklund

   Break for lunch 12:45 pm – 1:15 pm

6. Fiduciary Responsibility Training
   1:15 pm – 2:00 pm
   a. pp. 51-66 Fiduciary Responsibility
   Presenters: Rachel Barth, Kathy Woodruff [DISCUSSION]

7. Strategic Plan Update
   2:00 pm – 2:15 pm

8. Public Comments
   2:15 pm – 2:30 pm

9. Board Annual Review
   2:30 pm – 3:30 pm
10. Dates of Future Meetings:

<table>
<thead>
<tr>
<th>Date and Notes</th>
<th>Board Meetings (9:30 am in Room 106 unless noted)</th>
<th>Audit Committee Meetings (9:30 am in Room 414)</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 23, 2020 - virtual via WebEx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>November 18, 2020 - virtual via WebEx</td>
<td>November 17, 2020</td>
<td></td>
</tr>
<tr>
<td>January 20, 2021</td>
<td></td>
<td></td>
</tr>
<tr>
<td>March 10, 2021</td>
<td>March 9, 2021</td>
<td></td>
</tr>
<tr>
<td>June 16, 2021</td>
<td>June 15, 2021</td>
<td></td>
</tr>
</tbody>
</table>

11. Adjourn

Board members may participate by telephone. Members of the public wishing to address the board shall give notice (preferably in writing) to either the board president or executive director in advance of the meeting. The board provides members of the public with opportunities to address the board at the conclusion of the agenda. Members of the public should limit their comments to three (3) minutes and confine comments to matters under the board’s jurisdiction and authority. Stakeholder groups wishing to speak to the board shall designate a spokesperson. The board reserves the right to determine what issues come before the board at any given time.
Board President Martha Lee Zins called the meeting to order at 1:00 p.m. During the meeting, Zins was in TRA Board room 414. Those attending in addition to Zins were:

Trustees: Denise Anderson, Will Baumann, Melissa Lam Young, Luke Olson, Mary Supple, and Joel Stencel, all participating remotely via WebEx.

TRA Staff: In attendance in TRA board room 414 was Jay Stoffel. In attendance remotely via WebEx were David Anderson, Rachel Barth, Carol Diedrich, Tim Maurer, Leslie Nagel, Sonja Parr, and John Wicklund.

Legal Representative: Kathy Woodruff participated remotely via WebEx.

Others: attending remotely via WebEx was Amy Jorgenson.

1. Called to order at 1:00 p.m.
   Zins called the meeting to order at 1:00 p.m. Roll call was taken.

2.a. Approval of Minutes of Board meeting on June 17, 2020
   It was moved by Olson and seconded by Supple to approve the minutes of the June 17, 2020 meeting. A roll call vote was taken. The motion was passed unanimously.

3.a. Board Vacancy – Review of Applications
Each trustee was given the opportunity to present their thoughts about the six applications that were received to fill the Board vacancy. Following that process there was extensive discussion among the Board members regarding the applicants. Board discussion focused on qualifications for being a board member and it was agreed that candidate Raph best met those qualifications. Board members also agreed on the importance of diversity and bringing new perspectives to the Board, and that Raph's teaching experience at several different academic levels, in addition to his work in special education, would be a valuable addition.

   It was moved by Denise Anderson and seconded by Lam Young to offer the vacant Board position to Noel Raph. A roll call vote was taken. The motion was passed unanimously by the Board.
It was moved by Olson and seconded by Baumann that Noel Raph’s position on the TRA Board would be effective immediately upon his written acceptance. A roll call vote was taken. The motion was passed unanimously by the Board.

4. Adjourn
The meeting adjourned at 2:15 p.m. with a motion by Supple, seconded by Denise Anderson. A roll call vote was taken. The motion was passed unanimously by the Board.

Attest:

_____________________________
J. Michael Stoffel
Executive Director

_____________________________
Martha Lee Zins
President
Minneapolis Teachers Retirement Association
Board of Trustees Retreat

Estimation of July 1, 2020
Valuation Results

August 19, 2020
Recap of Last Year’s Valuation

July 1, 2019

Unfunded Actuarial Accrued Liability (UAAL) $6.8 billion
Funding Ratio 76.8%

As % of Pay

Normal Cost (with expenses) 9.41%
Amortization of UAAL 7.77%
Total Required Contribution 17.18%
Member and Employer Contributions 16.27%

Contribution Sufficiency/(Deficiency) (0.91%)

Note: if future scheduled contribution increases are considered, there is a contribution sufficiency of 0.17%
Market value of assets at 6/30/2020 is $22.7 billion (about 4.2% return for FY 2020)

Contributions and benefit payments for FY 2020 were estimated from the 2019 valuation since actual amounts are unknown at this time.

Actuarial value of assets uses a smoothing mechanism
- Deferred gain at 7/1/2019 was about $405 million
- Deferred loss at 7/1/2020 is estimated at $212 million
Estimating 2020 Valuation Results

➢ All actuarial assumptions, other than investment return, are assumed to be met for FY 2020 (no actuarial gain/loss from actual demographic experience)

➢ Total covered payroll, used in estimating 2020 valuation results, is based on the 3% payroll growth assumption
## Estimated Actuarial Status – July 1, 2020

### Actuarial Value of Assets Basis

<table>
<thead>
<tr>
<th></th>
<th>July 1, 2019 (Actuarial Value)</th>
<th>July 1, 2020 (Actuarial Value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actuarial Accrued Liability</td>
<td>29.2</td>
<td>29.9</td>
</tr>
<tr>
<td>Asset Value</td>
<td>22.5</td>
<td>22.9</td>
</tr>
<tr>
<td>Unfunded Actuarial Accrued Liability (UAAL)</td>
<td>6.8</td>
<td>7.0</td>
</tr>
<tr>
<td>Funded Ratio</td>
<td>76.8%</td>
<td>76.6%</td>
</tr>
<tr>
<td>Normal Cost (with expenses)</td>
<td>9.41%</td>
<td>9.41%</td>
</tr>
<tr>
<td>Amortization of UAAL</td>
<td>7.77%</td>
<td>7.93%</td>
</tr>
<tr>
<td>Total Required Contribution</td>
<td>17.18%</td>
<td>17.34%</td>
</tr>
<tr>
<td>Member plus Employer Contributions</td>
<td>16.27%</td>
<td>16.46%</td>
</tr>
<tr>
<td>Contribution Surplus/(Deficiency)</td>
<td>(0.91%)</td>
<td>(0.88%)</td>
</tr>
<tr>
<td>Ultimate Contribution Surplus/(Deficiency)</td>
<td>0.17%</td>
<td>0.01%</td>
</tr>
</tbody>
</table>

Note: Numbers may not add due to rounding
## Estimated Actuarial Status – July 1, 2020
### Market Value of Assets Basis

<table>
<thead>
<tr>
<th>$ in Billions, Contributions as % of pay</th>
<th>July 1, 2019 (Market Value)</th>
<th>July 1, 2020 (Market Value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actuarial Accrued Liability</td>
<td>29.2</td>
<td>29.9</td>
</tr>
<tr>
<td>Asset Value</td>
<td>22.9</td>
<td>22.7</td>
</tr>
<tr>
<td>Unfunded Actuarial Accrued Liability (UAAL)</td>
<td>6.4</td>
<td>7.2</td>
</tr>
<tr>
<td>Funded Ratio</td>
<td>78.2%</td>
<td>75.9%</td>
</tr>
<tr>
<td>Normal Cost (with expenses)</td>
<td>9.41%</td>
<td>9.41%</td>
</tr>
<tr>
<td>Amortization of UAAL</td>
<td>7.31%</td>
<td>8.16%</td>
</tr>
<tr>
<td>Total Required Contribution</td>
<td>16.72%</td>
<td>17.57%</td>
</tr>
<tr>
<td>Member plus Employer Contributions</td>
<td>16.27%</td>
<td>16.46%</td>
</tr>
<tr>
<td>Contribution Surplus/(Deficiency)</td>
<td>(0.45%)</td>
<td>(1.11%)</td>
</tr>
<tr>
<td>Ultimate Surplus/(Deficiency)</td>
<td>0.63%</td>
<td>(0.22%)</td>
</tr>
</tbody>
</table>

Note: Numbers may not add due to rounding
Projection of Funding Results

- Uses the 2019 valuation projection model, reflecting actual FY 2020 asset return

- Future returns on the market value of assets, beginning in FY 2021, are assumed to be 7.5% (assumed return)

- Expected results assume:
  - All actuarial assumptions are met in future years
  - No future changes to the scheduled contribution rates
  - No future change to the benefit provisions occurs
  - No future changes to actuarial assumptions or methods
Project Funded Ratio

If all assumptions are met, the funded ratio is projected to reach 100% in 2047 compared to 2042 in the 2019 valuation.
Changes to Actuarial Standards of Practice

➢ Actuarial Standards of Practice (ASOPs) provide professional guidance to credentialed actuaries in the United States

➢ Proposed updates to ASOP 4 (which gives overall direction on measuring pension liabilities)
  ▪ The most significant issue is a requirement that the liability be calculated assuming assets are invested in low-default risk obligations
    – Essentially a “market value of liability” measure
    – Significant pushback from the public plan community in the comment letters, but the requirement is still in the new exposure draft
  ▪ Anticipate adoption this winter which would make it effective for TRA with the 2022 valuation.
Caveats and Disclaimers

➢ These results reflect the preliminary asset return information for FY 2020, as provided by TRA.

➢ Estimated results were based on the 2019 valuation data and assumptions – the actual 7/1/2020 valuation results will be different.

➢ Projections are based on many assumptions. To the extent these are not met, results could vary dramatically, especially over time.

➢ Future projections are developed to compare and evaluate outcomes under various scenarios, and are not intended to predict future valuation results.

➢ The actuaries who prepared these results, Patrice Beckham, FSA, EA, MAAA, FCA, Ben Mobley, ASA, MAAA, FCA and Brent Banister, FSA, EA, MAAA, FCA, are members of the American Academy of Actuaries and are qualified to render the actuarial opinions presented herein.
August 5, 2020

Mr. John Wicklund
Chief Financial Officer
Teacher Retirement Association of Minnesota
60 Empire Drive, Suite 400
St. Paul, MN 55103

Re: Projection of TRA Membership

Dear John:

Enclosed are projections of certain TRA membership statistics that you requested. For purposes of this study, the data from the July 1, 2019 actuarial valuation and the new Board-adopted assumptions (to be used in the 2020 valuation) were used. The projections assume that all of the demographic assumptions used in the actuarial valuation are met each year in the future. Based on a study performed by the State Demographer, the number of school-age children in Minnesota is expected to remain stable over the next twenty years, so we assumed the total number of active members would also remain constant. Future hires are assumed to have the same demographic profile as the recent hires used to develop the projection model prepared in conjunction with the July 1, 2019 actuarial valuation. For purposes of this study, the term “retirees” includes retired members, beneficiaries, and disabled retirees, except as noted below.

The Excel file we are providing shows the number of members retiring each fiscal year (July 1 to June 30), the total number of members receiving benefits, and the total retiree deaths expected each year. Note that the number of retiree deaths includes retired members as well as current beneficiaries. Due to software limitations, future beneficiaries are not included in the number of deaths, but this is expected to be a comparatively modest number for the period considered.

Projections of future events rely on a number of assumptions. Significant items are noted below:

- All demographic assumptions regarding mortality, disability, retirement, and termination of employment are assumed to be met exactly each year in the future. Please note that the actuarial assumption reflects the expectation that mortality will improve in the future (i.e. people will live longer).
- The potential impact, if any, of the COVID-19 pandemic on member behavior including retirement, termination, election of refund and death has not been reflected in these projections due to the limited data currently available. While this event may impact member behavior and demographic patterns in the near term, we believe the valuation assumptions used in this study are still reasonable estimates for member behavior over the long term.
- We have assumed that there will be no future plan changes that would affect the benefit eligibility or employment patterns of the TRA’s members.
Actuarial assumptions are developed primarily for the measurement of the Association’s liabilities, rather than counts, and so the demographic assumptions may not necessarily be the best estimate of measures of membership counts and demographics. We would expect, however, that the general results and trends of this study would not be materially different if they were based on assumptions developed solely for this purpose.

The number of active members covered by TRA in the future is assumed to remain level (neither growth nor decline in the active membership count). As active members leave employment, they are assumed to be replaced by new members who have a similar demographic profile as recent new hires. With the gradual departure of current Tier 1 active members, who were hired before July 1, 1989, and who have different retirement eligibility from Tier 2, the demographic composition of the membership is expected to gradually change. This change is reflected in our projections.

The actuaries relied upon the membership data provided by TRA for the July 1, 2019 actuarial valuation. The results of this study depend on the integrity of this information. If there are material inaccuracies in this data, the results presented herein may be different and the projections may need to be revised.

Because not all of the assumptions will unfold exactly as expected, actual results will differ from the projections shown.

Sincerely,

Patrice A. Beckham, FSA, EA, FCA, MAAA  
Principal and Consulting Actuary

Brent A. Banister, PhD, FSA, EA, FCA, MAAA  
Chief Actuary

Ben Mobley, ASA, FCA, MAAA  
Senior Actuary
## Projection of Benefit Recipients (Retirees)

<table>
<thead>
<tr>
<th>Year Beginning July 1</th>
<th>Number Retiring</th>
<th>Number Retired</th>
<th>While in active status:</th>
<th>Deals in the Next Year</th>
<th>While in pay status</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>2,488</td>
<td>-</td>
<td>2,488</td>
<td>41</td>
<td>1</td>
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<tr>
<td>2020</td>
<td>2,300</td>
<td>-</td>
<td>2,300</td>
<td>41</td>
<td>25</td>
</tr>
<tr>
<td>2021</td>
<td>2,262</td>
<td>-</td>
<td>2,262</td>
<td>41</td>
<td>36</td>
</tr>
<tr>
<td>2022</td>
<td>2,333</td>
<td>-</td>
<td>2,333</td>
<td>42</td>
<td>49</td>
</tr>
<tr>
<td>2023</td>
<td>2,148</td>
<td>36</td>
<td>2,184</td>
<td>42</td>
<td>62</td>
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<tr>
<td>2024</td>
<td>2,082</td>
<td>76</td>
<td>2,158</td>
<td>42</td>
<td>76</td>
</tr>
<tr>
<td>2025</td>
<td>2,135</td>
<td>114</td>
<td>2,249</td>
<td>43</td>
<td>106</td>
</tr>
<tr>
<td>2026</td>
<td>2,167</td>
<td>165</td>
<td>2,332</td>
<td>43</td>
<td>125</td>
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<tr>
<td>2027</td>
<td>2,217</td>
<td>183</td>
<td>2,400</td>
<td>43</td>
<td>144</td>
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<tr>
<td>2028</td>
<td>2,235</td>
<td>208</td>
<td>2,443</td>
<td>44</td>
<td>166</td>
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<tr>
<td>2029</td>
<td>2,291</td>
<td>239</td>
<td>2,530</td>
<td>43</td>
<td>191</td>
</tr>
<tr>
<td>2030</td>
<td>2,336</td>
<td>263</td>
<td>2,599</td>
<td>43</td>
<td>219</td>
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<tr>
<td>2031</td>
<td>2,397</td>
<td>283</td>
<td>2,680</td>
<td>43</td>
<td>249</td>
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<tr>
<td>2032</td>
<td>2,431</td>
<td>303</td>
<td>2,734</td>
<td>43</td>
<td>282</td>
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<tr>
<td>2033</td>
<td>2,409</td>
<td>336</td>
<td>2,745</td>
<td>43</td>
<td>320</td>
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<tr>
<td>2034</td>
<td>2,526</td>
<td>377</td>
<td>2,903</td>
<td>43</td>
<td>361</td>
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<tr>
<td>2035</td>
<td>2,544</td>
<td>408</td>
<td>2,952</td>
<td>44</td>
<td>202</td>
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<td>2036</td>
<td>2,529</td>
<td>434</td>
<td>2,963</td>
<td>45</td>
<td>255</td>
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<tr>
<td>2037</td>
<td>2,483</td>
<td>466</td>
<td>2,949</td>
<td>45</td>
<td>298</td>
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<tr>
<td>2038</td>
<td>2,365</td>
<td>500</td>
<td>2,865</td>
<td>45</td>
<td>345</td>
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<td>2039</td>
<td>2,403</td>
<td>551</td>
<td>2,954</td>
<td>46</td>
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<tr>
<td>2040</td>
<td>2,416</td>
<td>590</td>
<td>3,006</td>
<td>46</td>
<td>440</td>
</tr>
</tbody>
</table>
Projected Number of In-Pay Members

Number Receiving Benefits

- Current Retirees
- Current and Future Actives

July 1 of Year
Projected Number of Annual Retiree Deaths

Fiscal Year End

Number Deceasing

- 500
- 1,000
- 1,500
- 2,000
- 2,500
- 3,000
Minnesota Teachers Retirement Association
Board of Trustees Retreat

Population Projections

August 19, 2020
Goal is to assist TRA in anticipating staffing levels needed to provide future member services.

Based on 2019 valuation data, but uses the new demographic assumptions. Assumes a constant active membership size in future years.

- Because the two benefit tiers now have separate retirement rates, this study should be an improvement over the prior study.

While assumptions are designed to model liabilities rather than headcounts, the general trends shown here should be reasonable.

For purposes of this study, the term “retirees” includes retired members, beneficiaries, and disabled retirees.
Projected Number of Annual Retirements

Assumes members past their assumed retirement age all retire immediately.
Projected retiree count is 82,022 in 2040, nearly equal to active count of 82,965.
Projected Number of Annual Retiree Deaths

Note: Current beneficiaries are included in counts, but not future beneficiaries.
Caveats and Disclaimers

➢ These results were based on the 2019 valuation data and the new Board-adopted assumptions to be used in 2020. Note that the assumptions have been selected to model liabilities rather than populations, but we believe these trends are still reasonable estimates.

➢ Projections are based on many assumptions. To the extent these are not met, results could vary dramatically, especially over time.

➢ The actuaries who prepared these results, Patrice Beckham, FSA, EA, MAAA, FCA, Ben Mobley, ASA, MAAA, FCA and Brent Banister, FSA, EA, MAAA, FCA, are members of the American Academy of Actuaries and are qualified to render the actuarial opinions presented herein.
Trends and Comparisons

EXHIBIT 5A
Active membership totals 82,965. The majority of active teachers in the TRA plan (56,896 or 68.6%) are between ages 30 and 54, and are fairly evenly distributed across those ages.

- 11,980 (14.4%) are age 29 or younger; 14,089 (17.0%) are age 55 or older.
- 467 TRA members are still active educators at age 70-plus.

(Current assumption is that all active members retire by age 71)
TRA has 61,073 retired members. Nearly half are in the age 65 to 74 range (29,361 or 48%).

The youngest retiree group, age 55-59, number only 1,515 or 2.5% of TRA’s retirees.

TRA has 2,167 retirees age 90+ (3.5 percent) and 71 are over the age of 100.

Oldest TRA retiree is 114 years old.
The active-member population remained steady at about 77,000 between 2008 and 2014. In 2016, the number of working educators exceeded 80,000.

Benefit recipient population has increased from 46,981 in 2008 to 67,285 in 2019.

Correspondingly, the ratio of active members to benefit recipients declined from 1.6 in 2008 to 1.2 in 2019. **Will the lines cross? What would be the implications?**
Year-over-year change in actuarial accrued liabilities (in billions)

<table>
<thead>
<tr>
<th>Year</th>
<th>Actuarial Accrued Liability</th>
<th>Change over prior year</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$23.1</td>
<td>4.0%</td>
</tr>
<tr>
<td>2010</td>
<td>$22.1</td>
<td>-4.5%</td>
</tr>
<tr>
<td>2011</td>
<td>$22.2</td>
<td>0.4%</td>
</tr>
<tr>
<td>2012</td>
<td>$23.0</td>
<td>3.8%</td>
</tr>
<tr>
<td>2013</td>
<td>$23.4</td>
<td>1.7%</td>
</tr>
<tr>
<td>2014</td>
<td>$24.5</td>
<td>4.7%</td>
</tr>
<tr>
<td>2015</td>
<td>$25.6</td>
<td>4.2%</td>
</tr>
<tr>
<td>2016</td>
<td>$26.7</td>
<td>4.5%</td>
</tr>
<tr>
<td>2017</td>
<td>$27.4</td>
<td>2.6%</td>
</tr>
<tr>
<td>2018</td>
<td>$28.6</td>
<td>4.4%</td>
</tr>
<tr>
<td>2019</td>
<td>$29.2</td>
<td>2.1%</td>
</tr>
</tbody>
</table>

- Payroll growth changed from 4.5%-3.75%
- Salary scale changed to service-based
- Decrement timing changed from beginning to mid-year
- Actuarial software change
- Recognition of 2.5% COLA trigger liability
- COLA trigger recognized
- Wage, salary assumption changes
- CSA load reduced
- Change of early retirement reduction factors
- Large actuarial gain for salary increases
- Mortality improvements

Actuarial reforms in 2010:
- Payroll growth changed from 4.5%-3.75%
- Salary scale changed to service-based
- Decrement timing changed from beginning to mid-year
- Actuarial software change

Recognition of 2.5% COLA trigger liability

Payroll changes:
- Payroll growth changed from 4.5%-3.75%
- Salary scale changed to service-based
- Decrement timing changed from beginning to mid-year
- Actuarial software change

Mortality improvements:
- Change of early retirement reduction factors
- Large actuarial gain for salary increases
Because we have a heavy retiree liability, COLA changes are powerful.

In a poor investment environment, upward pressure on contribution rates is particularly intense when there is a higher retiree load.
Ratio of benefits to contributions

Negative cash flow is normal for a mature pension fund.

2018 legislation will reduce the ratio in the future:
- Employee and employer contributions are increasing
- Benefits are lower (COLA, deferred augmentation, early retirement)
Ratio of benefits to assets

Benefits as a % of assets:
- 2008: 7.3%
- 2009: 10.0%
- 2010: 9.5%
- 2011: 8.4%
- 2012: 8.9%
- 2013: 8.4%
- 2014: 7.8%
- 2015: 8.1%
- 2016: 8.8%
- 2017: 8.3%
- 2018: 8.1%
- 2019: 8.1%

Assets @ market

Benefit payments
Cash flow as a percent of assets

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>TRA</td>
<td>-4.9%</td>
<td>-6.7%</td>
<td>-6.5%</td>
<td>-5.8%</td>
<td>-5.9%</td>
<td>-5.4%</td>
<td>-4.8%</td>
<td>-4.6%</td>
<td>-5.0%</td>
<td>-4.7%</td>
<td>-4.6%</td>
<td>-4.7%</td>
</tr>
<tr>
<td>USA Ave.</td>
<td>-2.3%</td>
<td>-3.1%</td>
<td>-3.2%</td>
<td>-3.1%</td>
<td>-3.3%</td>
<td>-3.1%</td>
<td>-2.9%</td>
<td>-2.8%</td>
<td>-3.0%</td>
<td>-2.9%</td>
<td>-2.6%</td>
<td>-2.6%</td>
</tr>
</tbody>
</table>
TRA Annual Return vs. State/Local Pension

SBI Annualized Returns - June 30, 2019:
- 3 Yr = 10.9%
- 5 Yr = 7.3%
- 10 Yr = 10.9%
- 20 Yr = 6.5%
- 30 Yr = 8.8%

Legislation in 2018 reduced TRA assumed return to 7.5%
Actuarial funded ratio, TRA vs. U.S. state/local plans

<table>
<thead>
<tr>
<th>Year</th>
<th>TRA</th>
<th>US avg.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>82.0%</td>
<td>84.5%</td>
</tr>
<tr>
<td>2009</td>
<td>77.4%</td>
<td>78.4%</td>
</tr>
<tr>
<td>2010</td>
<td>78.5%</td>
<td>75.8%</td>
</tr>
<tr>
<td>2011</td>
<td>77.3%</td>
<td>74.4%</td>
</tr>
<tr>
<td>2012</td>
<td>73.0%</td>
<td>72.4%</td>
</tr>
<tr>
<td>2013</td>
<td>71.6%</td>
<td>72.4%</td>
</tr>
<tr>
<td>2014</td>
<td>74.1%</td>
<td>73.3%</td>
</tr>
<tr>
<td>2015</td>
<td>77.1%</td>
<td>73.3%</td>
</tr>
<tr>
<td>2016</td>
<td>75.6%</td>
<td>71.9%</td>
</tr>
<tr>
<td>2017</td>
<td>76.8%</td>
<td>72.2%</td>
</tr>
<tr>
<td>2018</td>
<td>76.9%</td>
<td>72.4%</td>
</tr>
<tr>
<td>2018</td>
<td>76.8%</td>
<td>72.1%</td>
</tr>
</tbody>
</table>
### TRA, MSRS, PERA: a comparison

**June 30, 2019**

*(dollar amounts in millions)*

<table>
<thead>
<tr>
<th></th>
<th>TRA</th>
<th>MSRS</th>
<th>PERA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Benefit Payments</td>
<td>$1,864</td>
<td>$842</td>
<td>$1,536</td>
</tr>
<tr>
<td>Covered Payroll</td>
<td>$5,001</td>
<td>$3,169</td>
<td>$6,524</td>
</tr>
<tr>
<td><strong>Benefit Payments as a % of Covered Payroll</strong></td>
<td>37.3%</td>
<td>26.6%</td>
<td>23.5%</td>
</tr>
<tr>
<td>Net Assets at Market</td>
<td>$22,876</td>
<td>$13,772</td>
<td>$22,441</td>
</tr>
<tr>
<td><strong>Benefit Payments as a % of Net Assets</strong></td>
<td>8.1%</td>
<td>6.1%</td>
<td>6.8%</td>
</tr>
<tr>
<td>Annual Contributions</td>
<td>$827</td>
<td>$365</td>
<td>$955</td>
</tr>
<tr>
<td><strong>Benefit Payments as a % of Contributions</strong></td>
<td>225%</td>
<td>231%</td>
<td>161%</td>
</tr>
<tr>
<td>Actuarially Accrued Liability-Active Members</td>
<td>$10,491</td>
<td>$6,205</td>
<td>$12,130</td>
</tr>
<tr>
<td>Actuarially Accrued Liability-Retirees</td>
<td>$18,755</td>
<td>$8,974</td>
<td>$15,840</td>
</tr>
<tr>
<td><strong>Total AAL</strong></td>
<td>$29,246</td>
<td>$15,179</td>
<td>$27,970</td>
</tr>
<tr>
<td><strong>Retiree Liability as a % of Total AAL</strong></td>
<td>64.1%</td>
<td>59.1%</td>
<td>56.6%</td>
</tr>
<tr>
<td>Active Members</td>
<td>82,965</td>
<td>51,997</td>
<td>154,130</td>
</tr>
<tr>
<td>Benefit Recipients</td>
<td>67,285</td>
<td>42,373</td>
<td>105,243</td>
</tr>
<tr>
<td><strong>Ratio of Active to Retiree</strong></td>
<td><strong>1.2</strong></td>
<td><strong>1.2</strong></td>
<td><strong>1.5</strong></td>
</tr>
</tbody>
</table>
Weighted average of annual required contribution paid, by state
Unpaid ARC 2008 to 2019 = $1.4 billion (principal). Interest accrues on balance annually.

Underpayment of ARC leads to higher unfunded liability.

Continual underpayment of ARC puts increased pressure on contribution rates and benefit reductions to close funding gap.
### Benefit calculations in 2016 and replacement ratio

<table>
<thead>
<tr>
<th>Service Credit</th>
<th>23 yrs</th>
<th>27 yrs</th>
<th>31 yrs</th>
<th>35 yrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual TRA benefit</td>
<td>$25,680</td>
<td>$31,680</td>
<td>$37,680</td>
<td>$44,004</td>
</tr>
<tr>
<td>Final average salary</td>
<td>$65,827</td>
<td>$70,081</td>
<td>$73,802</td>
<td>$76,641</td>
</tr>
<tr>
<td>Replacement ratio, TRA benefit only</td>
<td>39.0%</td>
<td>45.2%</td>
<td>51.1%</td>
<td>57.4%</td>
</tr>
</tbody>
</table>

| Annual Social Security benefit | $14,400 | $16,800 | $19,200 | $21,600 |

| Total TRA and Social Security | $40,080 | $48,480 | $56,880 | $65,604 |
| Replacement ratio, TRA & Social Security | 60.9% | 69.2% | 77.1% | 85.6% |

Mission: retirement security, income replacement
Looking ahead: Demographics

Neither TRA nor its actuaries can accurately predict what will occur in the distant future regarding the number of active educators and the number of retirees in the system.

A wide range of factors might bend the trend lines up or down. Are these issues potential net positives (+), net negatives (-), or neutral (+/-) for TRA’s financial status?

- The large baby boom generation eventually will complete its lifecycle through the TRA system. (+) (Pre-1989 active membership declining rapidly) and (Youngest boomers now age 55)
- However, the retiree boomer bulge will last for about 30-35 more years. (-)
- Increased life expectancies mean current and future retirees likely will receive benefits longer. (-)
- The current generation of educators is choosing to work longer. (+)
- The size of the education workforce may remain the same or outside pressures (privatization, reemployed annuitants) might result in fewer paying into TRA. (+/-)
- Student enrollment (population) trends. (+/-)
- Four-year experience study report was delivered to the Board in May 2019.
TRA Statistics and Outreach efforts for Fiscal Year 2020
My TRA registrations

<table>
<thead>
<tr>
<th>Year</th>
<th>Active</th>
<th>Inactive</th>
<th>Retired</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2017</td>
<td>23,178</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY 2018</td>
<td>38,615</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY 2019</td>
<td>49,420</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY 2020</td>
<td>58,494</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Active 30,887 - 53%
Inactive 7,866 - 13%
Retired 19,741 - 34%
TRA retirement applications

Applications

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Online application</th>
<th>Paper Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>355</td>
<td>2519</td>
</tr>
<tr>
<td>2020</td>
<td>540</td>
<td>2380</td>
</tr>
</tbody>
</table>
### Estimates - In-house vs On-line

<table>
<thead>
<tr>
<th></th>
<th>FY 2019</th>
<th>FY 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-House Estimates</td>
<td>30,503</td>
<td>28,471</td>
</tr>
<tr>
<td>Internet Estimates</td>
<td>33,426</td>
<td>37,175</td>
</tr>
</tbody>
</table>
TRA My Message Inbox

Messages sent

Messages received

- May-19: 432, 338
- Jun-19: 531, 464
- Jul-19: 640, 522
- Aug-19: 685, 573
- Sep-19: 783, 656
- Oct-19: 782, 652
- Nov-19: 500, 404
- Dec-19: 456, 374
- Jan-20: 654, 516
- Feb-20: 490, 461
- Mar-20: 923, 478
- Apr-20: 1042, 427
- May-20: 917, 482
- Jun-20: 1102, 502

- May-19: 500, 456
- Jun-19: 654, 516
- Jul-19: 490, 461
- Aug-19: 923, 478
- Sep-19: 1042, 427
- Oct-19: 917, 482
- Nov-19: 1102, 502

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TRA Counselling sessions FY2019 = 5,656
TRA Counselling sessions FY2020 = 4,708
For the year, a **decrease of 948, or 17%**.

TRA Counselling sessions February – June 2019 = 2,391
TRA Counselling sessions February – June 2020 = 1,518
For the **last 5 months** of fiscal year 2020, a **decrease of 873, or 37%**.
Outreach statistics Fiscal Year 2020

Presentations 123 live, 14 webinar

Attendees 2472 live, 238 webinar

WebEx counseling appointments
- May 4 - June 30: 114
- July 1 - August 31: 453
Phone Appointments: 501
Board Fiduciary Training 101:
Guide to Fulfilling Your Fiduciary Duties

Rachel Barth
TRA Legal & Legislative Dir.

TRA Board Retreat
August 19, 2020
Who is a Fiduciary?

Determined by state statute:

356A.02 FIDUCIARY STATUS AND ACTIVITIES.

Subdivision 1. Fiduciary status. For purposes of this chapter, the following persons are fiduciaries:

1. any member of the governing board of a covered pension plan;
2. the chief administrative officer of a covered pension plan or of the State Board of Investment;
3. any member of the State Board of Investment; and
4. any member of the Investment Advisory Council.

All TRA board members and the TRA executive director are fiduciaries

TRA staff, actuaries, and legislators are NOT fiduciaries
What Does it Mean to be a Fiduciary?

**Generally**

- A fiduciary is a person who has a duty to act for the benefit of another.
- A fiduciary owes a duty of care and trust to another and must put aside personal interests for the benefit of another when there is a conflict.
- A fiduciary can be held *personally liable* for a breach of duty.

**Specifically**

As a TRA fiduciary, you owe a duty to and must act for the benefit of:

- The plan’s beneficiaries (i.e. active, deferred, and retired members);
- The taxpayers; **and**
- The state of Minnesota.

*Minn. Stat. § 356A.04, subd. 1*
What are Fiduciary Duties?

Fiduciary duties fall into two broad categories

DUTY OF CARE

DUTY OF LOYALTY
Duty of Care

Duty to act as a “prudent person” would when carrying out fiduciary responsibilities.

Prudent Person Rule:

A fiduciary…shall act in good faith and shall exercise that degree of judgment and care, under the circumstances then prevailing, that persons of prudence, discretion, and intelligence would exercise in the management of their own affairs, not for speculation, considering the probable safety of the plan capital as well as the probable investment return to be derived from the assets.

Minn. Stat. § 356A.04, subd. 2
**EDUCATION**

Make informed decisions:
- You are **required** to “make reasonable effort to obtain knowledge and skills” to allow you to perform your fiduciary activities “adequately.”
  
  *Minn. Stat. § 356A.13, subd. 1*
  
  - You are **not** required to be an expert
- Ask questions!
- Determine if there is a need for an expert opinion

---

**COMPLIANCE**

Ensure your actions and decisions comply with:
- The plan document (Minn. Stat., Chapters 354 & 356)
- Other applicable state and federal laws
- Board policies and resolutions
Duty of Loyalty
The “Cardinal Rule”

3 Basic Requirements

- Interests of beneficiaries, taxpayers, the state
- Personal interests of the fiduciary
- Providing authorized benefits
- Avoiding conflicts of interest and self-dealing
When are Fiduciary Duties Owed?

Duties are owed any time you are acting within a fiduciary capacity, which includes decisions about:

- Benefits;
- Eligibility for membership or benefits;
- The amount or duration of benefits;
- Funding requirements or the amounts of contributions;
- Maintaining membership or financial records;
- Expenditures of plan assets.

Minn. Stat. § 356A.02, subd. 2

All of the above “must be carried out faithfully, without prejudice, and in a manner consistent with law and the plan document.” (Duty of Loyalty)

Minn. Stat. § 356A.05, para. (b)
What is the Purpose?

When making decisions as a fiduciary, you must do so for the sole purpose of:

| Providing authorized benefits to plan participants and beneficiaries | DUTY OF LOYALTY |
| Incurring and paying reasonable and necessary administrative expenses | DUTY OF CARE |
| Managing TRA in accordance with the purposes and intent of the plan document | DUTY OF CARE |

Minn. Stat. § 356A.05, para. (a)
Conflicts of Interest
Handling the inevitable

How do you balance the conflicting interests of multiple parties?

– Discuss and consider the interests of all parties
– Find a resolution that best attempts to balance the various interests
– If conflict persists, remember that the **Exclusive Benefit Rule** applies

Section 401(a)(2) of the Internal Revenue Code requires that a qualified plan, like TRA, be maintained for the **exclusive benefit** of the employees or their beneficiaries. Also, it must be impossible, at any time prior to the satisfaction of plan liabilities, for any part of the principal or income of the trust (i.e. the plan) to be diverted for any other purpose.

**Important**

many of you are both a fiduciary and a TRA plan beneficiary. It is not generally a breach of your fiduciary duties if a decision you made in your fiduciary capacity also personally benefits you so long as you did not prioritize your personal interests over the interests of all plan beneficiaries when you made the decision.
Avoiding Conflicts of Interest

As a public official (which you are!), each fiduciary must:

– File an annual “Statement of Economic Interest for Public Officials” statement, which discloses:
  
  • Compensation
  • Securities
  • Real estate

*Minn. Stat. § 356A.06, subd. 4*

– Only accept gifts of nominal value (~$5), i.e. trinkets, mementos

– Submit a conflicts of interest disclosure

These additional rules and disclosures assist you in ensuring that you are avoiding conflicts of interest
Breach of Fiduciary Duty

A breach of a fiduciary duty means you could be held *personally liable*

At the discretion of the governing board, a board member may be indemnified from liability for a fiduciary breach

*Minn. Stat. § 356A.11, subd. 1*
Co-Fiduciary Responsibility

Each fiduciary has a general responsibility to:

– Oversee the fiduciary activities of all other fiduciaries; and
– Correct or alleviate a fiduciary breach the co-fiduciary had or should have had knowledge of

A co-fiduciary who fails to satisfy these responsibilities is liable for a breach committed by another fiduciary

Minn. Stat. § 356A.10

Continuing Education

Two education requirements:

1. Make reasonable effort to obtain knowledge and skills that will allow fiduciary to adequately perform fiduciary activities;

2. Board shall develop and periodically revise a continuing education program for fiduciaries to provide the required knowledge and skills

Minn. Stat. § 356A.13
More to Keep in Mind

- TRA must abide by the MN Government Data Practices Act, Minn. Stat., Ch. 13
  - Classifies government data and establishes disclosure requirements depending on the classification
- TRA may only be required to **publicly** disclose a member/survivor’s name, gross benefit amount, and type of benefit awarded.
- A TRA member/survivor’s address, birth date, direct deposit number, and tax withholding data is classified as **private**.

(Minn. Stat. § 13.43, subd. 2a; Minn. Stat. § 13.63)

**Remember!** Board meetings are **public**, so members must use caution to not discuss private data
Questions??